

### Amendments to the Specification:

ON PAGE 12, SECOND PARAGRAPH, LINES 5 AND 7:

The fractal model of Figures 3a and 3b are applicable to breast tissue at a “micro” level scale (application to distances of up to about 100  $\mu\text{m}$ ), typically representing single cells, basic compound cells/tissue units, and compound tissues. At a “macro” level (applicable to distances in excess of about 100  $\mu\text{m}$ ) a different fractal model, namely that of Figures 3[[b]]c and 4, is appropriate and is capable of representing compound tissues, integral single type cells and integral compound type cells. The exact distances at which the micro and macro models apply will [[diffe]] differ slightly from tissue to tissue, and the exact cut-off point for a particular tissue may be readily determined by one skilled in the art. Where the “micro” and “macro” scale fractal models interact (i.e. at approximately 100  $\mu\text{m}$  [[distances]] distances) the  $Z_{\text{com}}$  units are the same. Thus a “micro” level fractal model  $Z_{\text{com}}$  unit is used as a “macro” level fractal model  $Z_{\text{com}}$  unit. This is referred to as the “ICI” model of integrated cell impedance. Thus, the overall model of tissue impedance is a fractal one, in the sense that the equivalent circuit at any give scale comprises sub-units in a common arrangement, and each of the sub-units itself comprises smaller sub-units which are also in the same common arrangement (i.e. the cascaded arrangement of Figures 3 and 4).

ON PAGE 14, UNDER TABLE 3A:

#### NOTES:

$Z_i$  - intra-cellular impedance of single cell

$Z_{i\text{com}}$  - integral intra-cellular impedance among the cells

$Z_x$  - extra-cellular impedance of single cell

$Z_{x\text{com}}$  - integral [[intra]] extra-cellular impedance among the cells

$Z_m$  -membrane impedance of single cell

$Z_{m\text{com}}$  -integral membrane impedance among the cells

$C_m$  - membrane capacitance of single cell

$CM_{\text{COM}}$  - INTEGRAL MEMBRANE CAPACITANCE AMONG THE CELLS